

\*\*\*\*\*SYTIME\*\*\*\*\*  
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F.A. PROJECT NO.

NOTES

ASSUMED LIVE LOAD -----HS20-44 OR ALTERNATE LOADING.

DESIGN FILL-----

FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.

3"Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.

THIS BARREL STANDARD TO BE USED ONLY ON CULVERT ON 75° SKEW AND TO BE USED WITH STANDARD WING SHEET WITH THE SAME SKEW AND VERTICAL CLEARANCE.

DIMENSIONS FOR WING LAYOUT AS WELL ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.

TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED TO LIMIT THE POURS TO A MAXIMUM OF 70 FT. LOCATION OF JOINTS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.

STEEL IN THE BOTTOM SLAB MAY BE SPliced AT THE PERMITTED CONSTRUCTION JOINT AT THE CONTRACTOR'S OPTION, EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION, HE MAY SPlice THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL AND BOTH FACES OF INTERIOR WALLS ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPlice LENGTH SHALL BE AS PROVIDED IN THE SPlice LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEER FOR APPROVAL, DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE DESIGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.

LOCATION SKETCH

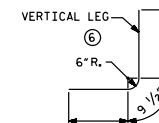
TOTAL STRUCTURE QUANTITIES			
CLASS A CONCRETE			
BARREL @	CY/FT		C.Y.
WING ETC.			C.Y.
TOTAL			C.Y.
REINFORCING STEEL			
BARREL			LBS.
WINGS ETC.			LBS.
TOTAL			LBS.

PROJECT NO. \_\_\_\_\_

\_\_\_\_\_ COUNTY

STATION: \_\_\_\_\_

SHEET 2 OF 2



BAR TYPE

BAR DIMENSIONS ARE OUT TO OUT

PROFILE ALONG C CULVERT

ADDED 8-11-90

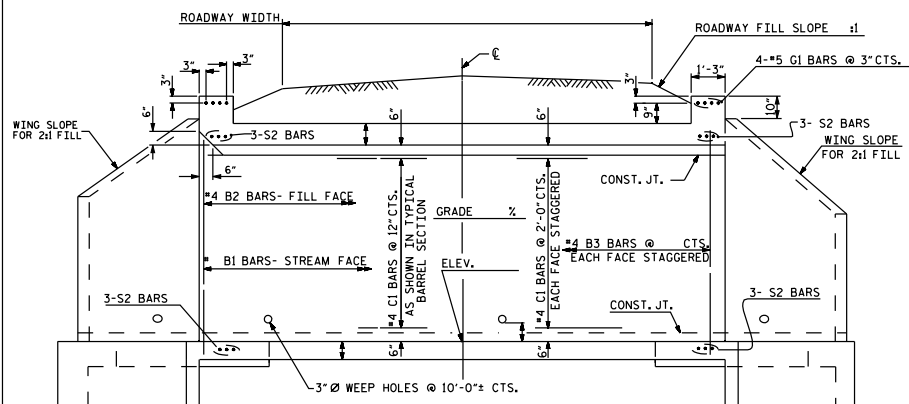
ASSEMBLED BY : _____	DATE : _____	SPECIAL
CHECKED BY : _____	DATE : _____	
DRAWN BY : <u>R.W.WRIGHT</u>	DATE : <u>OCT. 1989</u>	STANDARD
CHECKED BY : <u>A.R.BISSETTE</u>	DATE : <u>OCT. 1989</u>	

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
BARREL STANDARD  
TRIPLE FT. X FT.  
CONCRETE BOX CULVERT  
75° SKEW

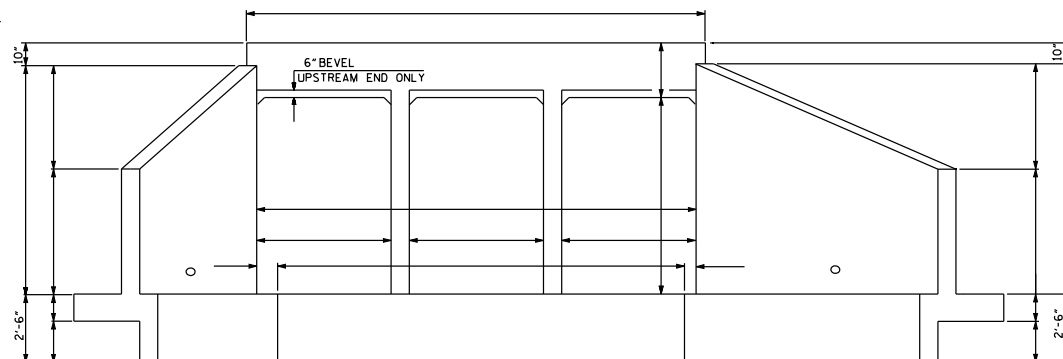
AUGUST						1989	SHEET NO.
REVISIONS							
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS	
1			3				
2			4				

STD. NO. CB23A

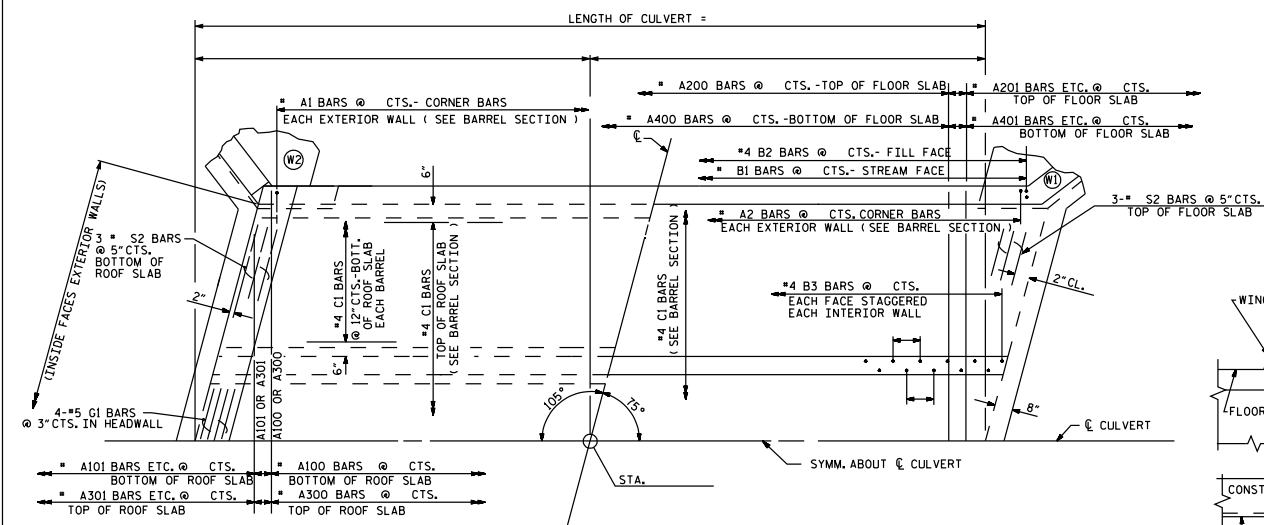
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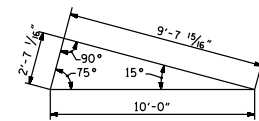
EXTERIOR WALL INTERIOR WALL  
CULVERT SECTION NORMAL TO ROADWAY



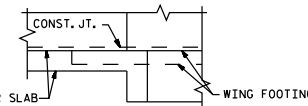
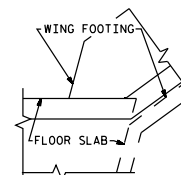
END ELEVATION NORMAL TO SKEW



PART PLAN - ROOF SLAB PART PLAN - FLOOR SLAB



SKEW TRIANGLE



DETAIL  
CONNECTION OF WING FOOTING  
AND FLOOR SLAB WHEN SLAB  
IS THICKER THAN FOOTING

PROJECT NO. \_\_\_\_\_  
\_\_\_\_\_ COUNTY  
STATION: \_\_\_\_\_  
SHEET 2 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
BARREL STANDARD  
TRIPLE FT. X FT.  
CONCRETE BOX CULVERT  
75° SKEW  
1971

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS
2			4			

STD. NO. CB23

REVISED 8-9-99 BY NAK CHECKED BY R.W.K.  
REVISED 8-20-92 BY E.L.R. + B.Y. G.D.P.  
REWORK 6-26-99 BY R.W.K. + B.Y. G.D.P.

ASSEMBLED BY :	DATE :	SPECIAL
CHECKED BY :	DATE :	
DRAWN BY :	DATE :	STANDARD
CHECKED BY :	DATE :	